

CASE STUDY

Best Practices for Hospitality Teams to Reduce Food Waste at Events



Executive Summary

The Pacific Coast Food Waste Commitment and its consultant Astrapto LLC partnered with seven hospitality sites (five hotels and two convention centers) along the West Coast to identify and pilot best practices for hospitality operations to reduce food waste at their events.

The findings of the pilot led to this set of recommendations for sites holding events:

- 1 Build in food waste reduction conversations across all teams and develop a positive, improvement-minded culture.** All teams, from the culinary to stewarding departments, have a role in influencing and determining food waste.
- 2 Prioritize engaging sales and service teams.** While all teams must be engaged to prevent food waste, sales and service teams are in the unique position of being able to guide the client and bring them on board with adopting low-waste strategies.
- 3 Start by targeting a few food items that are the biggest offenders—“Prolifically Problematic Items” (PPIs).** By starting small and targeting PPIs, event sites can make a large impact on their waste without getting overwhelmed. Common PPIs identified during the pilots include bread rolls, bagels, salad dressing, and desserts.
- 4 Streamline menus by offering a reduced number of choices and right-sized servings.** Reducing menu items requires a small lift, yet it has a high ROI.
- 5 Collect data on food waste over time and require input from sales, service, culinary, banquets, operations, and stewarding departments.** Photo audits where staff take photos of post-event waste are an easy-to-implement and highly effective way to begin tracking waste.



Background: Why Food Waste Reduction in Events is So Difficult

In this pilot, the Pacific Coast Food Waste Commitment (PCFWC) and its partners emphasized tackling food waste in events through *prevention* to maximize the positive financial, environmental, and social impacts. However, prevention can feel counterintuitive in hospitality, a field and term often associated with generosity and abundance. Taking measures to avoid overabundance may seem counter to a company's brand and the service level expected by clients. Thus, many staff might interpret food waste reduction initiatives as equivalent to denying guests food or service and then having to deal with unhappy customers. Fortunately, there are waste-prevention strategies that only reduce waste, while saving costs and still ensuring quality of services for clients. In addition, many clients are increasingly demanding more sustainable service options from their event hosts.

There is a reigning perception that food waste is a problem to solve in the kitchen, but in truth, preventing food waste in events starts earlier in the process and requires focusing more on sales discussions and planning phases and involving teams not normally included in food waste conversations. A number of small yet meaningful decisions in the ordering and planning phases can have far-reaching consequences, especially when enacted at scale for events serving thousands of attendees.

Although food waste prevention in hospitality often comes down to accurate forecasting, events are a challenging numbers game because:

- Events can be very unpredictable, and actual attendance levels are unknown until the day of the event. Food and beverage minimums are based on original attendee estimates, which may mean food that is not needed is ordered and provided nonetheless to justify final budgets.
- The sales and service teams – which have early decision-making power that strongly determines downstream or eventual impact – may rely on commissions and hold revenue goals that can supersede waste reduction objectives.
- Demographics and historical data for repeat clients can inform decisions but are not always easy to obtain.
- There is an upward trend in requests for special meals to meet medical, religious, and dietary needs or preferences. This can make it difficult to properly plan for and manage food, likely leading to more waste.





Pilot Structure: Strategies Implemented

Each of the seven sites received support in the form of a two-day food waste prevention training, facilitated dialogue among teams (sales, service, banquet, and culinary), and food waste tracker tool. The following strategies were piloted by all sites:

- 1 Incorporating a review of food waste reduction actions into regular internal communications.
- 2 Including all departments – but especially sales and service team members – in food waste prevention goals and planning.
- 3 Using two methods for collecting waste data: a food waste tracker tool and photo audits.
- 4 Implementing quick wins, such as addressing Prolifically Problematic Items (PPIs) and right-sizing serving vessels.

Each site was asked to identify and select an event with which to pilot all of the low-waste strategies identified above. Qualitative data was gathered through interviews and focus groups on the effectiveness of the piloted strategies and the sites' most significant implementation barriers. At the end, all teams were surveyed to learn about the lasting impact of the trainings and implementation of the pilot at their selected events. The survey results are documented below and are intended to serve as a guide for others across the hospitality and event planning industry.

Hospitality Staff Reflections

The following table shows the strategies that were introduced in the trainings at each site and the number of respondents across all sites (out of 36 total survey takers) who selected that strategy as “continuing in their operations months later.”

Post-Pilot Survey: Check all of the following strategies that you have noticed in practice since the training.

Waste Reduction Strategy	% of Respondents Who Continued the Strategy
Conversations about food waste in internal meetings	92%
Changing (or right-sizing) the vessels and/or equipment	75%
Photos of food for the purposes of understanding and reducing waste	64%
Editing or developing the standard menu with food waste in mind	56%
Advising clients in ways that prevent waste	50%
Usage of an audit tool (some form of measuring or observing and tracking food waste)	47%
Addition of or improved donation processes	47%
Kitchen production processes that reduce waste	47%
Storage or inventory management to reduce spoilage and waste	36%
Access to signage or educational materials	36%
Increased/improved composting	33%

Staff members were also asked in the post-pilot survey to identify the top three strategies (from the list in the table above) that they thought had or could have the biggest impact on their site’s food waste reduction practices. The most popularly selected “top three strategies” were:

- 1** Changing (or right-sizing) the vessels and/or equipment (so that overly large serving bowls/spoons are replaced with smaller ones that deliver more appropriate portion sizes).
- 2** Editing the standard menu to minimize food waste, for example, by offering fewer items or reusing surplus items from one meal to the next.
- 3** Advising clients in ways to prevent waste.

These staff reflections were aggregated into the qualitative data collected from the focus groups, interviews, and onsite pilot observations and used to develop the following set of key recommendations for reducing waste in events.

Recommendations for Reducing Waste in Events

1. Culture, Communication, and Consistency

It is important to explore the role each department plays in generating and preventing food waste. While the culinary team plays a critical role, so does everyone involved in the flow of food – including sales, service, culinary, procurement, banquets/operations, and stewarding. As such, they should also be included in identifying and reducing key food waste sources.

After the pilot training, participants experienced change and improvement in the general perception, dialogue, and collaboration around food waste. As one participant said:

“It’s easier to go back to the kitchen with feedback, where before it would be a little awkward to go and say ‘You produced too much.’ It’s opened up those conversations and allowed us to be more transparent with each other. It’s not like we’re just trying to tell you everything you’re doing is wrong, but they’re actually taking that feedback, and you can see the adjustments they’ve made.”

Many people resist having more meetings, and coming out of COVID, staff in hospitality commonly report feeling overworked. Yet a recurring theme across all sites after the training was that *more scheduled and intentional meetings are needed to share, analyze, and act on the new observations and audits around food waste*. While important and growing in frequency, informal conversations are not enough; topic-specific meetings are needed to cement the new learnings.



Recommendations for building a culture of food waste reduction:

- **Instill a sense of ownership and responsibility.** Involve all teams in training and engage them in determining which strategies they will undertake, so as to develop a sense of ownership over the food waste reduction efforts. For example: sales can better capture numbers; the kitchen team can better plan ratios and portions; the banquets team can better monitor needs; and stewarding can share the end results to help everyone evaluate and improve.
- **Make the time.** If teams do not ensure that food waste is a regular item given space on the agenda, it is unreasonable to expect much lasting change.
- **Include food waste in existing reports on food and beverage performance,** so that there is ongoing understanding and accountability over time.
- **Orient new staff members to food waste reduction practices.** There is often high turnover in hospitality teams; treating and teaching food waste reduction practices like every other element of new staff training will help indoctrinate staff and ensure consistent performance.

2. Prolifically Problematic Items

At each site, an exercise was conducted during the workshop to identify the top 10 most commonly wasted foods at events. The items on almost every site list included:



Coffee and creamer



Bread and bagels



Cheese and charcuterie boards



Pastries and muffins



Desserts and cookies



Fruit platters and bowls



Salad and dressing



Condiments and sauces

The fact that an item may be on the cheaper end of options is often used as justification for continuing to order it, despite the large amount of waste. For example, cantaloupe and honeydew are the items most commonly seen left on fruit platters. At one property, a participant noted, “But melon is cheap,” and another participant replied, “Congratulations, you didn’t pay much for that trash.” Reducing these PPIs requires a shift away from an “over-abundance is better” mindset.



Recommendations for handling Prolifically Problematic Items:

- **Identify particular Prolifically Problematic Items** through waste audits or talking with the different teams about what they see.
- **Choose 1-2 items to tackle at a time.** Department leaders and supervisors can easily mention these focus items in staff and pre-shift meetings without overwhelming their teams.
- **Work with the sales teams** to change offerings to avoid these items, and plan for how to talk to clients about the reality of these items often being wasted.
- **Work with the kitchen teams** to revise menus to reduce the quantity of or avoid certain items.

3. Right-Sizing Vessels and Portions

Food waste is created in hospitality settings when the recipes or reasonable portion sizes do not match the serving containers and utensils used. For example, the executive chef may state that two ounces per person of a sauce is sufficient. However, in this scenario, is the busy line cook in the kitchen measuring out two ounces for every guest, or is the line cook handed a stack of vessels and filling each to a visually pleasing level? *The vessel issue was such an obvious problem and easy fix that most properties immediately committed to purchasing vessels to right-size condiments, toppings, sauces, and dressing setup and service.*

“One thing we instituted was to reduce the amount of bread per table. We often have 10 tops and used to put 10 rolls out. At the end of the night we were throwing away a lot of rolls. We reduced to seven rolls per table and from two butter plates per table to one, which reduces the labor needed to cut butter and scrape dishes. The first night we saved about 130 rolls, not to mention all the butter we were able to put back in the fridge. It’s interesting to see something that started off as, ‘Hey, let’s try this for a night and see what happens’ to now it doesn’t even get brought up, it’s just what we do.”

– Pilot Participant



Recommendations for right-sizing vessels and portions:

- **Make small adjustments to standard ratios**, such as the number of rolls per person.
- **Invest in vessels and equipment** to right-size the service.
- **Establish and train staff on more precise menu specifications**, such as ounces of food per person, or other metrics that will prevent overserving.

4. Data is Critical for Change – Even When It’s Incomplete

In order to manage food waste, you must first measure it to understand where to focus your resources and attention. Big decisions like operational changes are easier to make when managers have a sense of what the impacts will be and have numbers to back those changes. Yet several challenges exist with gathering event waste data:

- No two events are exactly alike, making side-by-side comparisons difficult.
- Waste-tracking using kitchen scale technology and some AI solutions requires regular, ongoing measurement, but the placement of these tools is primarily in the kitchen, which limits the number of people who can use them.
- Weighing and characterizing the waste takes more time and effort than most teams can regularly undertake, especially in the hustle and bustle of a live event.

Taking into account the above challenges, the consulting team introduced two practical and easy-to-implement solutions for staff to pilot test: a food waste tracker tool and a photo audit technique. All sites used both solutions and shared the results from 3-5 events. Rather than weighing waste after each event, which can be too time-consuming and laborious, sites were trained to log food preparation, service, and waste information by count, volume, or weight, whichever was able to be recorded consistently across several events, into the waste tracker tool. The tool also offered the flexibility to focus on specific ingredients and dishes or to record all of the food prepared, consumed, and wasted across the entire event. During the pilot, properties seized on the tool’s flexibility and used it to varying degrees.



The audits also included before and after photos, which corroborated the logged tracker data. These pictures provided a strong visual learning and communication tool that served as a valuable feedback mechanism for conveying information. For example, a photo can show that cheesecake was often half eaten, so then a chef knows to downsize portion sizes. Similarly, a photo can show that melon was the least eaten item on the fruit plate, so ordering teams know to include less melon moving forward.

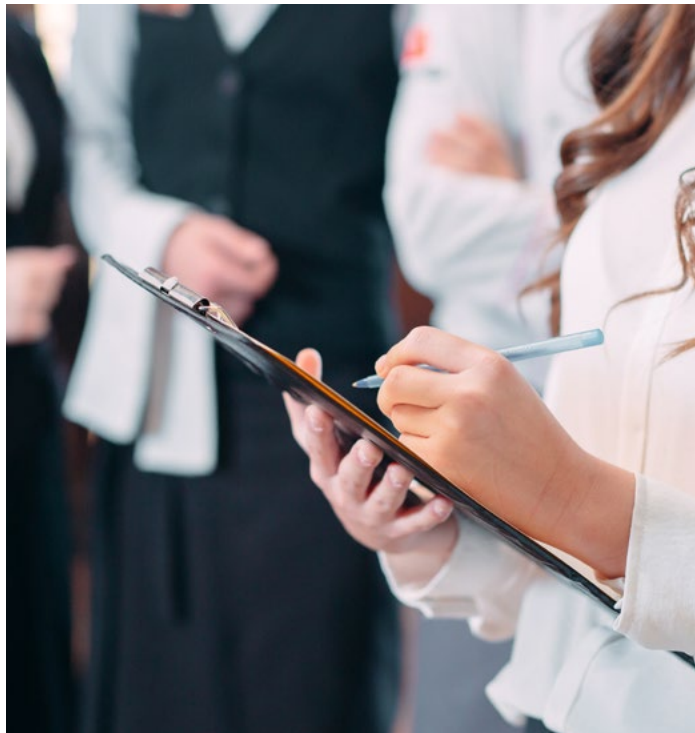
Members of the culinary team commonly deny or reject feedback that too much food was produced; however, photos opened the door to a different kind of dialogue. According to pilot participants:

“People are more likely to look at photos than read five paragraphs on a piece of paper. And if we place it throughout the service corridor, the kitchen, and the break room, it’s education.”

“The photos have been very powerful when the culinary team is in the room, because there’s only so much you can dismiss that something is a problem when there are photos of it.”

The tool was adjustable to fit the team’s goals. One property in the study simplified the tool to focus on a single dish or ingredient and created a synopsis and recommendations section to encourage their team to summarize the data gathered and make decisions based on what was observed.

See the next page for an example of how that property used the food waste tracker tool to understand the amount of rolls wasted at plated and buffet events and to determine if they needed to alter their preparation and service for future events.



Recommendations for using data to improve operations and reduce waste:

- **Download the [Food Waste Tracker Tool](#)** created from this pilot.
- **Ensure that sales/service, culinary, banquets/operations, and stewarding teams are all contributing** to the compilation and review of an audit.
- **Provide the teams with digital technology and storage to take photos of waste**, so that it can be used in follow-up meetings to explore solutions.
- **Refrain from using photos punitively** – keep the conversations and learning around photos positive.

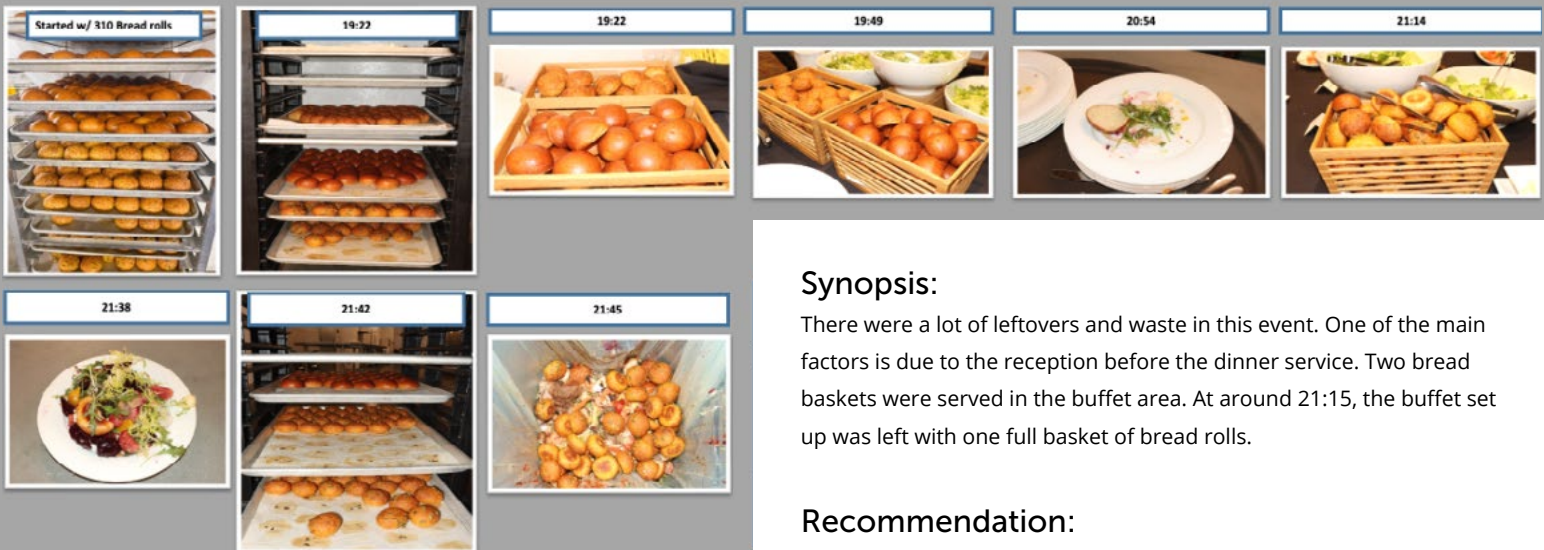
Recommendations in Practice: Using the Food Waste Tracker to Determine the Quantity of Dinner Rolls

The number of guaranteed attendees for a buffet event was 237. The property prepared 310 rolls. The actual guest count was 230, and the property served 70% of the total prepared (217 rolls). While the property could donate the 30% of rolls (93) that were prepared but not served, approximately 35% of the served rolls (76) were not consumed by attendees and therefore had to be thrown away. In total, over 54% of rolls (169) prepared were wasted, instead of eaten by their intended audience.

If the property serves rolls with buffet dinners twice per week at similar-sized events for one calendar year, with a similar amount of production and consumption, it is assumed that 17,576 rolls are wasted per year. Based on these findings, the property is aiming to remove bread rolls as a standard menu offering and instead add it as an enhancement offering for a fee.

A downloadable free version of the food waste tracker tool can be found [here](#).

Data for Buffet Event																			
Event ID		redacted		Date		December 9, 2022		Planned Attendees		200 guests		Guaranteed Attendees		237 guests		Actual Attendees		230 guests	
Event name		Holiday Party		Meal Start Time		7:05:00 PM													
Event location		redacted		Meal End Time		9:05:00 PM													
Planned								Actuals					Food Utilization Estimates						
Meal Service	Meal Type	Food Item	Serving Size	(Units)	Guaranteed Attendees	Estimated Need	Standard Ratio/person	Total No. of Food Produced	Actual Attendees	Ratio/person	Served	Unserved	Consumed from served bread	Waste from served bread	Potentially Donatable	Total Food Waste			
Dinner	Holiday Feast Buffet	Bread roll	1	piece	237	308.1	1.3	310	230	1.35	70%	30%	65%	35%	30%	35%			



Synopsis:

There were a lot of leftovers and waste in this event. One of the main factors is due to the reception before the dinner service. Two bread baskets were served in the buffet area. At around 21:15, the buffet set up was left with one full basket of bread rolls.

Recommendation:

We are working towards removing bread rolls as a standard menu offering and adding this as an enhancement with fee.

5. Engaging Sales Teams in Conversations With Clients

In the pre-training focus groups, many in operational roles emphasized the need for sales and event service to play a bigger role in addressing food waste. Currently, it is hard for sales and service teams to understand their part, as they see food waste as a culinary department responsibility.

After the training at each property, the sales and service teams expressed a much higher degree of confidence in being able to have a more productive conversation with clients. One staff member in sales noted:

“Clients are asking for this more and more, and it’s great to be able to have a ready-made answer for them. We’re actively solving the problem, so you’re able to mention that to clients, and it just rolls off your tongue. It’s so natural that they know it’s not something we’re making up. It’s actually something that’s important to the organization.”



Despite these positive advancements in client guidance, it remains a difficult conversation that can feel risky. As one participant noted:

“It’s hard for our salespeople to be that honest with client planners and say, ‘You know what, nine pounds of potatoes went back, but your group ate all of the bacon and the sausage.’ There’s nothing wrong with telling them that, but we think we shouldn’t tell them how much was wasted. People are afraid, but we need to be more open about it. It’s not that we’re withholding anything from them, and it comes down to tougher conversations with our planners.”

The menu is a key document that can help alleviate the awkwardness of these tougher conversations and enable sales and service teams to proactively address food waste with clients. These teams frequently cited that offering client planners too many choices leads to waste. At one property, an event services team member stated:

“There are 20 plated dinner options, and my planners aren’t going to read past the first three.”

At every property, someone (typically from non-culinary departments) mentioned the need to streamline menus or improve how menus are presented. Most sales and services teams said that once clients understood the “why,” they were open to recommendations that could reduce waste. To get them on board, sales teams can discuss how managing food waste saves on expenses and achieves sustainability and humanitarian goals (e.g., donating the event’s surplus food to food recovery organizations). The most powerful way to start the food waste conversation with clients/planners is to share the donation plan for leftover, unserved food. Everyone can get on board with supporting those who are food insecure, and if specific food recovery partners can be named, it helps paint a compelling story for the planner around the life-cycle impact of their event. Discussing donations can therefore open the door to broader food waste prevention conversations.



Recommendations for activating sales teams for food waste reduction:


- **Train sales teams and planners** to proactively engage customers to prevent food waste, using techniques such as talking about PPIs, starting with donation, reducing menu items, and other strategies.
- **Support sales and services teams with collateral** such as streamlined menus that they can present to planners.
- **Share the social and environmental “why” with clients** and how it connects to their organization’s values or mission; planners can be more receptive to prevention ideas when they understand the holistic benefits. Beginning the conversation with clients by first discussing a food donation plan is usually a welcome starting point before expanding the discussion to other food waste prevention strategies.

Conclusion

By default, events can lead to large amounts of food waste, and the thought of evolving processes and systems to address this can add to the pressure that many event staff already feel.

However, many of the solutions to food waste at events are practical and within easy reach. While it can take some effort to institutionalize these solutions, the benefits can be substantial – both financially and in terms of waste reduction.

For hospitality and planner teams looking for resources to improve their waste reduction strategies, check out the WWF and AHLA created platform [HotelKitchen.org](https://www.hotelkitchen.org).



The PCFWC will continue to work with hospitality partners on implementing these recommendations through formal future pilots focused on the planner-to-client relationship, as well as through informal support and information-sharing. **Please reach out to the PCFWC if you are interested in being a part of this effort.**

Acknowledgments

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About the Pacific Coast Food Waste Commitment

The Pacific Coast Food Waste Commitment (PCFWC) arose out of the [Pacific Coast Collaborative](https://pacificcoastcollaborative.org) in 2016 and is an innovative public-private partnership made up of West Coast jurisdictions, U.S. food industry leaders, and nonprofit resource partners that together seek to eliminate food waste in the region by 50% by 2030. Learn more about the initiative and its members at pacificcoastcollaborative.org/food-waste.

Business Signatories

(As of Fall 2023)

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